

REMARKS

Upon entry of the foregoing amendment, claims 1-42 are pending. Claim 40 is amended. No claims have been canceled or added. In view of the foregoing amendment and the following remarks, allowance of all the pending claims is requested.

Allowable Subject Matter

Applicants thank the Examiner for indicating claims 10-13, 15-16, 29-32 and 34-35 as directed toward allowable subject matter.

Claim Objections

The Examiner has objected to claim 40 as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have amended claim 40 to clarify that which Applicants regard as the invention thereby rendering this objection moot.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 1-9, 17, 20-28, 36, and 39-41 under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 5,621,764 to Ushirokawa *et al* ("Ushirokawa") in view of U.S. Patent No. 5,802,076 to Weigand *et al* ("Weigand"). The Examiner has rejected claims 14 and 33 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ushirokawa in view of Weigand and further in view of U.S. Patent 6,370,210 to Yamamoto ("Yamamoto"). The Examiner has rejected claims 18-19 and 37-38 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ushirokawa in view of Weigand and further in view of U.S. Patent No. 5,590,410 to Deutsch *et al* ("Deutsch"). The Examiner has rejected claims 21-25 under 35 U.S.C. 103(a) as allegedly being unpatentable over Ushirokawa in view of Weigand and further in view of U.S. Patent No. 6,603,746 to Larijani *et al* ("Larijani").

Applicants traverse each of these rejections because the various combinations of references do not teach or suggest the claimed inventions as set forth below.

With respect to claim 1, the Examiner alleges that Ushirokawa suggests:

a burst detector for signaling a detection of a burst if the signal strength change detection logic determines that a signal strength change of predetermined magnitude....

See Office Action dated March 10, 2004, at page 3. However, as is noted by the Examiner, Ushirokawa is silent with regard to pattern detector. According to the Examiner, Weigand discloses a pattern detector as:

An audio error mitigation technique for TDMA communication system is disclosed. The TDMA system transmits data in bursts during slot times. An audio error is assumed if **any one** of the following is met: a detection of a CRC error in the control data or audio data within a slot; the received signal strength is below a certain threshold; **or**, the detection of an invalid code word, such as an all zero nibble. If **either** of the criteria is met, and the slot contains audio data, an error mitigation routine is performed...

In the first step, an audio data burst in a slot is received and stored in a first buffer. Assuming the first burst was error-free, a new burst is received and stored in a second buffer. Next, for the new burst, it is determined whether **either** of the following criteria is met: a failure of the Cyclic Redundancy Check (CRC) codes to match, the Received Signal Strength Indicator (RSSI) is below a threshold, **or** the reception of an invalid word, such as an all 0 nibble, which is not defined by the G.721 vocoder algorithm.

See Weigand, col. 2 line 64 – col. 3 line 5, and col. 4 line 62 – col. 5 line 3.
(Emphasis added.)

At best, Weigand teaches that CRC detection may be used as an **alternative** to detecting when a received signal strength drops below a predetermined threshold. Weigand includes no teaching, express or implicit, of signaling a detection of a burst if a signal strength change detection logic determines that a signal strength change of predetermined magnitude has occurred and a pattern detector determines that a predetermined pattern of symbols is met. Thus, even if Ushirokawa was properly combined with Weigand, which Applicants do not concede, the combination still does not achieve all the features of the claimed invention.

In particular, the proposed burst detection system taught by the combination of Ushirokawa and Weigand would monitor a burst signal for errors based on a value of a

received signal strength, or a failure of CRC codes to match. In contrast, the claimed invention involves signaling a detection of a burst if a signal strength change detection logic determines that a signal strength change of predetermined magnitude has occurred and a pattern detector determines that a predetermined pattern of symbols is met. None of the other references relied upon by the Examiner address this deficiency of Ushirokawa in view of Weigand. Accordingly, claim 1 is patentable over the references relied upon by the Examiner.

Independent claims 7, 17, 20, 21, 26, 36, and 39 include features similar to those discussed above with regard to claim 1. Thus, for at least the reasons set forth above, claims 7, 17, 20, 21, 26, 36, and 39 are patentable over the references relied upon by the Examiner.

Claims 2-6, 8, 9, 22-25, 27-28, 40 and 41 depend from and add features to one of the independent claims. For at least this reason, these dependent claims are also patentable over the references relied upon by the Examiner.

Claims 14 and 33 depend from and add features to independent claims 1 and 26, respectively. The Examiner relies on Yamamoto to overcome the deficiencies of Ushirokawa in view of Weigand as related to these claims. However, Yamamoto does not address the deficiencies of Ushirokawa in view of Weigand as set forth above with regard to the independent claims. Thus, for at least this reason, claims 14 and 33 are also patentable over the references relied upon by the Examiner.

Claims 18, 19, 37, and 38 depend from and add features to either independent claim 17 or 36. The Examiner relies on Deutsch to overcome the deficiencies of Ushirokawa in view of Weigand as related to these claims. However, Deutsch does not address the deficiencies of Ushirokawa in view of Weigand as set forth above with regard to the independent claims. Thus, for at least this reason, claims 18, 19, 37, and 38 are also patentable over the references relied upon by the Examiner.

Claim 42 depends from and adds features to claims 21, 26, 36, or 39. The Examiner relies on Larijani to overcome the deficiencies of Ushirokawa in view of Weigand as related to this claim. However, Larijani does not address the deficiencies of Ushirokawa in view of Weigand as set forth above with regard to the independent

Customer Number
29315

U.S. Application Serial No. 09/735,369
Atty Docket No.: 26169-139
Reply and Amendment Under 37 C.F.R. § 1.111

claims. Thus, for at least this reason, claim 42 is also patentable over the references relied upon by the Examiner.

Customer Number
29315

U.S. Application Serial No. 09/735,369
Atty Docket No.: 26169-139
Reply and Amendment Under 37 C.F.R. § 1.111

CONCLUSION

A full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Dated: July 12, 2004

Respectfully submitted,



Customer Number
29315

Rick A. Toering
Registration No.: 43,195
MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND
POPEO P.C.
12010 Sunset Hills Road, Suite 900
Reston, Virginia 20190
703-464-4806